REMARKS

Favorable reconsideration of this application is requested in view of the following remarks.

Claim 1 has been amended as supported by Fig. 9A and page 13, line 12-17 of the specification and original claim 17. Accordingly, claim 17 has been canceled without prejudice. Claims 2-4, 10-13, and 16 have been amended editorially corresponding to the amendments to claim 1. Claim 6 has been amended as supported by Figs. 6A, 6B, and 7 and page 9, line 26 – page 10, line 9 of the specification. Claims 14 and 16 have been amended editorially.

Claim 20 has been added as supported by Figs. 5, 6A, 6B, 7, and 9B and the specification at page 9, line 26 – page 10, line 9 and page 14, lines 2-13 in addition to claim 1 and original claim 18. Claim 21 has been added as supported by Fig. 10A and the specification at page 14, lines 14-17 in addition to claim 1 and original claim 19. Accordingly, claims 18-19 have been canceled without prejudice.

Claims 1, 3, 5, 13, and 15 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Hiratsuka et al. (U.S. Patent No. 4,753,531) in view of Greenstein (U.S. Patent No. 4,025,669). Applicants respectfully traverse this rejection.

Claim 1 includes the limitations of original claim 17. This rejection relies on Greenstein as disclosing a method to form reagent layers in which a step of applying and drying a material liquid is repeated. Greenstein discloses a multiple pass method to produce printing paste including an inorganic particulate material, a pyrolyzable organic binder, and a solvent system including two types of solvents having different boiling temperatures, with the inorganic material being fused to the substrate by heat (see abstract and coln. 4, lines 1-12). Thus, Greenstein fails to apply a material liquid containing a reagent that reacts with a specific component in sample liquid as claim 1 requires. There is no reasonable basis to combine a method of Hiratsuka to produce an analytical instrument including a reagent (see abstract and coln. 4, lines 27-29) with a

method of Greenstein to form a paste, which has a completely different nature from the product of Hiratsuka. Accordingly, claim 1 is distinguished from Hiratsuka in view of Greenstein.

Claim 17 has been rejected as being unpatentable over Hiratsuka in view of Greenstein and further in view of Bruschi et al. (U.S. Patent 4,066,403). Even if Bruschi discloses an analytical element for assay of complex fluids including two reagents and a barrier composition that separates the reagents, Bruschi fails to disclose the method of forming the reagent layers by repeating a step of applying and drying and does not remedy the deficiencies of Hiratsuka and Greenstein.

Accordingly, this rejection should be withdrawn.

Claim 4 has been rejected under 35 U.S.C. 103(a) as being unpatentable over Hiratsuka et al. (U.S. Patent No. 4,753,531) in view of Greenstein (U.S. Patent No. 4,025,669), and further in view of Renn (U.S. Patent No. 3,975,162). Applicants respectfully traverse this rejection.

Claim 4 is distinguished from Hiratsuka in view of Greenstein for at least the same reasons as discussed for claim 1 above. Renn discloses a device for applying a measured quantity of water-soluble or water-dispersible reagent to a water-containing solid medium (see abstract) but fails to disclose that the reagent layers are formed by repeating the applying and drying of the material liquid including the reagent as claim 4 requires. Thus, Renn does not remedy the deficiencies of Hiratsuka and Greenstein. Accordingly, this rejection should be withdrawn.

Claims 2 and 10-11 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Hiratsuka et al. (U.S. Patent No. 4,753,531) in view of Greenstein (U.S. Patent No. 4,025,669), and further in view of Bass (U.S. Patent No. 6,420,180). Applicants respectfully traverse this rejection.

Claims 2 and 10-11 are distinguished from Hiratsuka in view of Greenstein for at least the same reasons as discussed for claim 1 above. Bass discloses a method for forming an addressable array on a substrate, in which a same reagent drop is deposited

from different deposition units (see abstract). Bass, however, fails to disclose layers of the reagent that are formed by depositing the reagent drops and drying them repeatedly as claims 2 and 10-11 require, and thus Bass does not remedy the deficiencies of Hiratsuka and Greenstein. Accordingly, this rejection should be withdrawn.

Claims 6-7 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Hiratsuka et al. (U.S. Patent No. 4,753,531) in view of Greenstein (U.S. Patent No. 4,025,669), and further in view of Dombrowski (U.S. Patent No. 5,047,206) and Naka (Japanese Patent Application Publication No. 08-247946). Applicants respectfully traverse this rejection.

Claims 6-7 are distinguished from Hiratsuka in view of Greenstein for at least the same reasons as discussed for claim 1 above. Dombrowski discloses a reagent test strip having a reagent, which is adhered and fixed to the reagent support portion (see abstract and coln. 2, lines 49-50). Dombrowski, however, fails to disclose a method to form layers including the reagent by repeating a step of applying and drying a material liquid including the reagent as claims 6-7 require, and thus, Dombrowski does not remedy the deficiencies of Hiratsuka and Greenstein.

Naka discloses a test piece that includes a reagent part into which a liquid sample is introduced (see abstract). Like Dombrowski, Naka fails to disclose the method to form the reagent layers by repeating a step of applying and drying a material liquid including the reagent as claims 6-7 require, and Naka does not remedy the deficiencies of Hiratsuka, Greenstein, and Dombrowski.

Accordingly, this rejection should be withdrawn.

Claims 8-9 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Hiratsuka et al. (U.S. Patent No. 4,753,531) in view of Greenstein (U.S. Patent No. 4,025,669), and further in view of Taguchi et al. (U.S. Patent No. 5,681,529). Applicants respectfully traverse this rejection.

Claims 8-9 are distinguished from Hiratsuka in view of Greenstein for at least the same reasons as discussed for claim 1 above. Taguchi discloses a biological fluid

analyzing device having a sample-treating chamber (see abstract). Taguchi, however, fails to disclose the sample-treating chamber or other part of the device includes reagent layers formed by repeating a step of applying and drying a material liquid including the reagent as claim 8-9 require and does not remedy the deficiencies of Hiratsuka and Greenstein. Accordingly, this rejection should be withdrawn.

Claim 12 has been rejected under 35 U.S.C. 103(a) as being unpatentable over Hiratsuka et al. (U.S. Patent No. 4,753,531) in view of Greenstein (U.S. Patent No. 4,025,669), and further in view of Demers (U.S. Patent No. 6,117,396). Applicants respectfully traverse this rejection.

Claim 12 is distinguished from Hiratsuka in view of Greenstein for at least the same reasons as discussed for claim 1 above. Demers discloses a liquid dispensing device for delivering a reagent liquid to a reagent fill channel and draining of liquid from the channel by gas (see abstract and coln. 5, lines 20-27). Demers, however, fails to disclose a method of forming reagent layers by repeating a step of applying and of a material liquid including the reagent as claim 12 requires, and Demers does not remedy the deficiencies of Hiratsuka and Greenstein. Accordingly, this rejection should be withdrawn.

Claim 14 has been rejected under 35 U.S.C. 103(a) as being unpatentable over Hiratsuka et al. (U.S. Patent No. 4,753,531) in view of Greenstein (U.S. Patent No. 4,025,669), and further in view of Matsushita (Japanese Patent Application Publication No. 09-016541). Applicants respectfully traverse this rejection.

Applicants note that Matsushita's publication number JP 410214772 in the Office Action and the Form 892 is apparently an error and respectfully request correction of the publication number in the Form 892. Claim 14 is distinguished from Hiratsuka in view of Greenstein for at least the same reasons as discussed for claim 1 above. Matsushita discloses a substrate heat-treating device (see abstract) but fails to disclose reagent layers or a method to produce the reagent layers as claim 14 requires. Thus, Matsuhita does not remedy the deficiencies of Hiratsuka and Greenstein. Accordingly, this rejection should be withdrawn.

Claim 16 has been rejected under 35 U.S.C. 103(a) as being unpatentable over Hiratsuka et al. (U.S. Patent No. 4,753,531) in view of Greenstein (U.S. Patent No. 4,025,669), and further in view of Rickerby et al. (U.S. Patent No. 5,656,364). Applicants respectfully traverse this rejection.

Claim 16 is distinguished from Hiratsuka in view of Greenstein for at least the same reasons as discussed for claim 1 above. Rickerby discloses a multiple layer erosion resistant coating on a substrate including alternate layers produced by sputtering (see abstract). Rickerby, however, fails to disclose reagent layers or the method to produce the reagent layers as claim 16 requires, and Rickerby does not remedy the deficiencies of Hiratsuka and Greenstein. Accordingly, this rejection should be withdrawn.

Claim 18-19 has been rejected under 35 U.S.C. 103(a) as being unpatentable over Hiratsuka et al. (U.S. Patent No. 4,753,531) in view of Greenstein (U.S. Patent No. 4,025,669), and further in view of Sekota et al. (U.S. Patent No. 5,178,831). Applicants respectfully traverse this rejection.

Claims 18-19 have been canceled. As discussed above, the limitations of claims 18 and 19 are included in claims 20 and 21, respectively.

Claim 20, which also requires a method of producing the reagent member by repeating a step of applying and drying a material liquid including a reagent, is distinguished from Hiratsuka in view of Greenstein for at least the same reasons as discussed for claim 1 above. Sekota discloses a device for testing body fluids including a test reagent (see abstract and coln. 3, lines 37-42). Sekota, however, fails to disclose the method of forming a reagent member by repeating a step of applying and drying a material liquid including the reagent as claim 20 requires. Sekota also fails to disclose that the reagent member is made of a group of individual reagent dots that are formed in the recess and are contacting with other dots of other subgroups in the group as claim 1 requires. Sekota further discloses that the device includes a test reagent and Ehrlich's reagent (see coln. 3, lines 32-37 and coln. 8, line 68 – coln. 9, line 8). However, Ehrlich's reagent is an indicator and does not react with a specific component contained

in sample liquid as claim 20 requires, and thus Sekota further fails to disclose a plurality of subgroups, each of which includes a different reagent, in reagent dots as claim 20 requires. Accordingly, Sekota does not remedy the deficiencies of Hiratsuka and Greenstein, and claim 20 is distinguished from Hiratsuka in view of Greenstein, and further in view of Sekota.

Claim 21 also requires the method of producing the reagent member by repeating a step of applying and drying material liquid including a reagent and is distinguished from Hiratsuka in view of Greenstein for at least the same reasons as discussed for claim 1 above. As discussed for claim 20 above, Sekota fails to disclose the method of forming the reagent members by repeating a step of applying and drying material liquid including the reagent. In addition, Sekota fails to disclose that the device includes two or more reagent members containing different reagents that react with a specific component contained in sample liquid as discussed for claim 20 above. Moreover, Hiratsuka, Greenstein, and Sekota do not disclose a method of producing an analytical tool that has a reagent member within the flow path, which is a different portion of the recess as claim 21 requires. Accordingly, claim 21 is distinguished from Hiratsuka in view of Greenstein, and further in view of Sekota.

In view of the above, Applicants request reconsideration of the application in the form of a Notice of Allowance.

Respectfully submitted,

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